

MUST News

Department of Environmental Quality

Fall Issue 2006

Continuous Leak Detection Requires Monthly Records

Probably the most common violation the Montana UST Section sees is the lack of monthly leak detection records for either tanks or piping. Continuous monthly leak detection, that is, interstitial monitoring with sensors, requires monthly records. So does any other form of monthly monitoring.

Ideally, the program wants operators to keep an ATG console record showing that the sensor is in communication with the console. This record is easily retrieved from most contemporary consoles.

If you cannot program or print this record, the USTS will accept monthly printed records showing "all functions normal" or a handwritten log showing that someone looked every month to see that "all functions normal" was displayed. ■

Buried
Underground
Storage
Tank

Inside This Issue

Continuous Leak
Detection Requires
Monthly Records 1

TankHelper Garners
National Award 2

When Underground
Storage Tanks are Part of
Land Transactions 2

Rules Underway for
Secondary Containment,
Dispenser Pumps 3

Consumer Testing
Organization Finds E85
Ethanol Offers Cleaner
Emissions but Poorer Fuel
Economy 4

UL Won't Label E85 Fuel
Dispensers 5

Sinclair Stations Auc-
tioned Off 6

Enforcement Report 7

Montana TankHelper ... 8



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TankHelper Garner's National Award

Montana's computerized TankHelper program available to all owners and operators of underground storage tanks has won this year's Digital Government Achievement Award from the Center for Digital Government.

TankHelper, accessible at <http://app.mt.gov/tank/>, is a program of the DEQ's Underground Storage Tank Section. Bill Rule is the section manager.

Rule said there is growing usage of the TankHelper Web site which was established earlier this year. Rule also noted that a looming federal requirement for mandatory owner/operator training would be easier to deal with through more widespread use of programs like TankHelper.

The site is designed principally to assist anyone with responsibility for on-site operation and maintenance of underground storage tank systems. The site offers training in plain and simple language about petroleum equipment, rules and responsibilities, best management practices, and state regulations. Users of TankHelper also can create their own site-specific management plans.

The Center for Digital Government is a national research and advisory institute on information technology policies and best practices in state and local government. The Center's award to TankHelper came in its government-to-business category. ■

When Underground Storage Tanks are Part of Land Transactions

When a person buys property, the purchase includes responsibility for any existing contamination on the property. The best advice in any purchase, including land, "Let the buyer beware."

The DEQ and the Petro Board may help with tanks and land-contamination issues

Two agencies within Montana's Department of Environmental Quality that deal with tanks are the Underground Storage Tank Section (USTS) and the Petroleum Release Section (PRS). The third leg of the underground tanks stool in Montana is the Petroleum Tank Release Compensation Board (PTRCB) which can reimburse tank owners for the cleanup costs for eligible facilities after a 50 percent cost-share of the first \$35,000 in costs. The USTS handles permitting of installations, modifications and closures; compliance with upgrade requirements and day-to-day operation and maintenance. The PRS is responsible for cleanup through project management of leaks and spills.

Special consideration for some UST systems

Farm or residential tanks that are often used for heating oil for consumptive use on the same property, having capacities of less than 1,100 gallons, and installed before April 27, 1995, do not come under regulation as underground storage tanks systems. However, any contamination these tanks cause results in state regulation even if the tanks' installation, operation, and maintenance are not regulated.

Regulated UST systems

The law requires regulation of any commercial underground storage tank, including any farm or residential underground storage tank installed after April 27, 1995, as well as any underground piping attached to above-ground tanks.

Some tanks, like Elvis, have left the property

The possibility of contamination is the chief concern with all tanks. If the USTs were registered with the DEQ and properly closed, the DEQ's UST Section may have a record of the tank removal and copies of the sampling results. If not, a Phase II site assessment conducted by an environmental consultant offers the best protection. A site assessment is only as good as the sampling. If the contamination is found on the property, it won't matter what previous results indicated. The contamination will need to be cleaned up.

About tanks that are not operational

If the property has underground storage tanks that were not properly closed, the DEQ will require the owner to pull them and sample for contamination. Compliance with UST regulations should be considered when buying land. Yet the

continued on page 3

When Underground Storage Tanks are Part of Land Transactions - *continued from page 2*

first concern remains, is the ground or groundwater contaminated? Compliance with closure requirements will not alter that critical question.

If a release is discovered, compliance may be a factor in gaining access to Petroleum Tank Release Compensation Funds. The UST section may be able to determine whether violations exist, but only the Petro Board can determine whether those violations impact eligibility. In many cases, the UST Section cannot determine from information in the file whether a tank system comes under state regulation or whether it is in compliance. If the tank was not registered with the DEQ or if its use was discontinued before November 1988, there may be no obtainable information about the tank.

When DEQ learns of a tank's existence, its permanent and proper closure will be required and the soil beneath it sampled for contamination. The property owner will be responsible for cleaning up the contamination as directed by the PRS. A found tank, or a non-notified tank, is considered active until the owner asks the department in writing to place the system into inactive status. The owner then has 90 days to empty the tank and 12 months to permanently and properly close it. For more information about inactive status and the Inactive Status Form, visit the [Inactive Status](#) page. The Petro Board eligibility rules require that an owner of a newly found tank submit a permit application to the UST section to pull the tank within 30 days of discovering it.

About operational tanks

As always, the possibility of contamination must be considered with operational tanks. And, as always, the owner of the property is responsible for cleaning up contamination regardless of who caused it and when it happened. A Phase II site assessment conducted by an environmental consultant offers the best protection. Compliance issues at operational facilities are addressed through third-party compliance inspections and operating permits. Find out when the operating permit expires on the Web site, [UST Facility Operating Permit Status](#). For information about compliance inspections, visit our [Compliance Inspection](#) Web page. If the tank systems are inactive, this Web page can instruct you on how to return it to active status.

Notification

Notification is the UST Section term for registering USTs in the name of the owner. Rules require that a new owner notify the department within 30 days of purchasing property with tanks. The department, via the One-Stop Licensing Program in the Montana Department of Revenue, will assess annual registration fees whether the tanks are in- or out-of-service. When tanks are permanently and properly closed, no further fees will be assessed. The [Notification and Registration](#) Web page can give you more information on notification and fees.



Rules Underway for Secondary Containment, Dispenser Pumps

The Montana Underground Storage Tank Section is drafting a new rule package, primarily to implement the secondary-containment and dispenser-pump requirements of the 2005 Federal Energy Act. The state USTS expects to have the proposed rule package in draft form by mid-December and available for comment early next year.

Pursuant to the federal law's requirements, the rules will require that all new and replacement tanks and piping be of double-walled construction and employ interstitial monitoring. When dispensers are replaced, or newly

installed, or dispenser islands are modified, dispenser sumps must be installed and monitored for releases.

The state USTS rule-changes also propose to:

- Update the existing referenced standards to the most recent versions and adopt the fire code that Montana's Department of Justice switched to in 2004 (NFPA 1- UFC);
- Require all past due tank registration fees be paid before the department issues an Operating Permit;

continued on page 4

Rules Underway for Secondary Containment, Dispenser Pumps - continued from page 3

- Fix the wording in ARM 17.56.701 to fit the definition of “inactive” in ARM 17.56.101;
- Require that lined tanks have an internal check ten years after it is installed and every five years thereafter even if they have corrosion protection applied;
- Require that automatic line leak detectors be replaced if they cannot detect a 4.0 GPH release;
- Establish that an operating permit is valid under the old ownership for 45 days after a land transaction. This will give the old and new owner time to notify the department of the transaction so that the program can produce a valid permit in the new owner’s name;
- Housekeeping:
 - Make rule definitions meet statutory definitions
 - ◆ Installation
 - ◆ Installer
 - ◆ Person
 - ◆ Petroleum Storage Tank
 - ◆ Release
- Cite correct statutory authority for financial responsibility in five places. The references were not updated when the citations changed in 1995;
- Change title of 17.56.203 to 660 gallons (from 1,000 gallons);

A later round of rule-making will follow the one currently being drafted to implement another requirement of the new federal Energy law, mandatory Operator Training. The program has an additional year or two to implement these rules and we will develop them in cooperation with some facility owners.

If anyone wants to be part of developing the operator training requirements, please contact Bill Rule at brule@mt.gov or (406) 444-0493. ■

Consumer Testing Organization Finds E85 Ethanol Offers Cleaner Emissions but Poorer Fuel Economy

E85 fuel is unlikely to fill more than a small percentage of U.S. energy needs.

Tests and an investigation by Consumer Reports magazine conclude that E85 ethanol will cost consumers more money than gasoline and that there are concerns about whether the government’s support of flexible fuel vehicles is really helping the U.S. achieve energy independence. Findings from the magazine’s October 2006 special report include:

- E85, which is 85 percent ethanol, emits less smog-producing pollutants than gasoline, but provides fewer miles per gallon, costs more, and is hard to find outside the Midwest.
- Government support for flexible-fuel vehicles, which can run on either E85 or gasoline, is indirectly causing more gasoline consumption rather than less.
- Blended with gasoline, ethanol has the potential to fill a significant minority of future U.S. transportation fuel needs.

To see how E85 ethanol stacks up against gasoline, Consumer Reports put one of its test vehicles, a 2007 Chevrolet Tahoe Flexible-Fuel Vehicle (FFV), through an array of fuel economy, acceleration, and emissions tests.

Overall fuel economy on the Tahoe dropped from an already low 14 mpg overall to 10. In highway driving, gas mileage decreased from 21 to 15 mpg; in city driving, it dropped from 9 mpg to 7. You could expect a similar decrease in gas mileage in any current flex fuel vehicle because ethanol has a lower energy content than gasoline—75,670 British thermal units

Consumer Testing Organization Finds E85 Ethanol Offers Cleaner Emissions but Poorer Fuel Economy - continued from page 4

(BTUs) per gallon instead of 115,400 for gasoline, according to the National Highway Traffic Safety Administration. As a result, you have to burn more fuel to generate the same amount of energy.

With the retail pump price of E85 averaging \$2.91 per gallon in August, according to the Oil Price Information Service, a 27 percent fuel-economy penalty means drivers would have paid an average of \$3.99 for the energy equivalent of a gallon of gasoline.

When Consumer Reports calculated the Tahoe's driving range, it found that it decreased to about 300 miles on a full tank of E85 compared with about 440 on gasoline. So, motorists using E85 would have to fill up more often. Most drivers in the country have no access to E85, even if they want it, because it is primarily sold in the upper Midwest; most of the ethanol in the U.S. is made from corn, and that's where the cornfields and ethanol production facilities are located. There are only about 800 gas stations—out of 176,000 nationwide—that sell E85 to the public.

When Consumer Reports took its Tahoe to a state-certified emissions-test facility in Connecticut and had a standard emissions test performed, it found a significant decrease in smog-forming oxides of nitrogen when using E85. Despite the scarcity of E85, the Big Three domestic auto manufacturers have built more than 5 million FFVs since the late '90s, and that number will increase by about 1 million this year.

A strong motivation for that is that the government credits FFVs that burn E85 with about two-thirds more fuel economy than they actually get using gasoline, even though the vast majority may never run on E85. This allows automakers to build more large, gas-guzzling vehicles than they otherwise could under Corporate Average Fuel Economy rules. As a result, these credits have increased annual U.S. gasoline consumption by about 1 percent, or 1.2 billion gallons, according to a 2005 study by the Union for Concerned Scientists.

From an alternative-energy perspective, it doesn't matter whether ethanol is blended as E85 or in lower mixes such as E10 (a 10/90 ethanol/gasoline mixture) that all cars can burn; a given amount of ethanol still goes just as far in reducing demand for gasoline. Experts agree that the maximum amount of ethanol you can get from corn in the U.S. is about 15 billion gallons. But scientists are working on producing ethanol from other plant material, called cellulose, which could increase this capacity by as much as 45 billion gallons. (For comparison's sake, the U.S. burned 140 billion gallons of gasoline in 2005.)

The important backdrop to the ethanol debate, of course, is that petroleum is a finite resource that's rapidly being depleted. Government scientists are planning for a day when world oil production peaks and begins to slow. They say the country must begin planning for alternatives 20 years before that peak. Today ethanol is receiving their attention because it requires fewer technological breakthroughs and less infrastructure development than batteries or fuel cells, and by including cellulose, its capacity can exceed that of biodiesel. ■

UL Won't Label E85 Fuel Dispensers

A recent announcement from Underwriters Laboratories Inc.

As of October 5, 2006, Underwriters Laboratories Inc. has suspended authorization to use UL markings (listing or recognition) on components for fuel dispensing devices that specifically reference compatibility with alcohol blended fuels that contain greater than 15 percent alcohol (i.e. ethanol, methanol or other alcohols).

Dispenser components as they relate to use with traditional fuel blends—containing 15 percent or less alcohols—are

unaffected. In all cases, acceptability of fuel dispensers for using alcohol-blended fuels containing greater than 15 percent alcohol—E85—remains at the discretion of the authority having jurisdiction.

Research indicates that the presence of high concentrations of ethanol or other alcohols within blended fuels makes these fuels significantly more corrosive. This may result in the fuel chemically attacking the materials used in fuel dispenser components, and may ultimately degrade the dispenser's ability to contain the fuel. While UL has no evidence of field issues related to this application, we are

continued on page 6

UL Won't Label E85 Fuel Dispensers - continued from page 4

suspending authorization to use the UL Mark on components used in dispensing devices that will dispense any alcohol blended fuels containing over 15 percent alcohol until updated certification requirements are established and the effected components have been found to comply with them.

Our engineers are actively reviewing current E85 research and meeting with industry and government experts to gather the information required to draft the revised certification requirements. UL anticipates that testing of E85 dispenser components will commence immediately following publication of UL's E85 certification requirements, as they pertain to the use of these higher alcohol blended fuels on a dispenser system. We remain committed to undertaking in an expeditious manner the thorough and broad based effort necessary to develop the appropriate requirements that will adequately address E85 compatibility.

We are here to answer any questions you may have and will respond promptly to your inquiries. For comments or questions, please contact us at UL.Notification@us.ul.com.

Newspaper reports UL and DOE holding hearings on E85 dispensers.

In its report on UL announcement, the New York Times noted that UL and the U.S. Department of Energy were holding two days of hearings this fall at UL's headquarters outside Chicago, inviting oil companies, automakers and researchers to help develop standards for E85 equipment.

The Times described UL's action as a "temporarily withdrawn authorization for its approved label on parts used in E85 dispensers." The newspaper said further, "Those dispensers were modified from regular gasoline dispensers and were certified only for a maximum of 15 percent ethanol; UL said it had never certified any E85 specific pumps." ■



Sinclair Stations Auctioned Off

*Reprinted by permission from the Great Falls Tribune
Sept. 27, 2006 – By Peter Johnson, Tribune Staff Writer*

Tentative bids were accepted for three former Sinclair gas stations in Great Falls and one each in Helena and Lewistown at a lively auction at the Great Falls Hampton Inn.

The five bids, totaling \$550,000, are subject to confirmation by Sinclair Oil Corp., which owns the stations.

No bids were made for two other Sinclair properties in Great Falls, an operating gas station/convenience store at 620 57th St. S. and a building at 324 Smelter Ave. N.E. now leased to Smokers Express.

An official with the Higgenbotham Auctioneers said an interested party began discussions after the auction for the operating gas station. Sinclair required that the winning bidder on that property make \$77,000 in upgrades to the station and sell only Sinclair branded products. Real estate broker Jim Voegelé said he was surprised at how low the Great Falls property sold for. He said some potential bidders told him they were unfamiliar with "the high

bidder's choice" method that was used on the first Great Falls properties, and therefore didn't bid. Under that method, the high bidder could choose which of the four properties he or she wanted to buy at that price, with the process then starting over for the remaining properties.

Auctioneer Marty Higgenbotham tried his best to spur the bidding. At one point when bidding stalled at \$65,000 he quipped that some pick-up trucks cost that much.

The winning bids were:

- \$175,000 for an inactive Sinclair station at 1800 Prospect Ave. in Helena. Winning bidder Rich Leitgeb of Helena said he owns a Taco Treat restaurant next door and plans to use the new property either for parking or to expand his existing operations. Leitgeb said he realizes this was one of the few gas stations that still had underground tanks in place, so he will have to pay to have them removed. "The bidding went higher

Sinclair Stations Auctioned Off - *continued from page 6*

than I wanted, so I hope this is a good business decision for me," he said.

- \$135,000 for a former station at 621 W. Main St. in Lewistown now leased to another business. Tom Wojtowick of Lewistown made the bid on behalf of the Lewistown Library Board and Creel Funeral Home. They will split the cost, remove a canopy and share the property for parking, he said. Two-thirds of the spaces generally will be reserved for the library, except during funerals.
- \$115,000 for a former station at 1301 10th Ave. S. currently leased to B&R Check Holders. Winning bidder Dave Pierce of Pierce's Superstores said he felt that was "a fair price" for 2,200 feet of property on 10th Avenue South. He said one factor that contributed to the price level was Great Falls' slight decrease in population. Pierce said he probably would use the property for "an automotive related purpose," such as a car wash or quick lube shop.

- \$65,000 for a vacant commercial building at 1401 Central Ave. W. Auto dealer Dan Bleskin made the bid for his father Pete and family. He said they're not sure yet what they'll do with the property.
- \$60,000 for a vacant commercial building at 3701 2nd Ave. N. The winning bidder declined to identify himself to the Tribune.

Salt Lake City-based Sinclair Oil Corp officials have said they are getting out of the retail gas business in Montana by auctioning off nine gas station/convenience stores in Montana and four in Idaho. Separate auctions were planned for stores in Kalispell and Bozeman.

The move affects only stations owned by Sinclair, not a number of independently owned stations in Montana. ■

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Enforcement Report

Joe Crumley of Keneco Petroleum Equipment, Great Falls, paid a \$2,352 administrative penalty to the Montana Department of Environmental Quality (DEQ) for violations of Montana's Underground Storage Tank Installer and Inspector Licensing and Permitting Act at Westside Self Service, Malta.

Under the act, a person may not install or close an underground storage tank (UST) system without a permit issued by the DEQ. In addition, a licensed installer/remover must comply with all permit conditions and submit all required installation and/or closure documents to the DEQ within 30 days of an installation or closure of an UST system.

In July 2006, DEQ issued an order citing Crumley for installing six UST systems at Westside before the department issued the required permit. Crumley was also cited for failing to comply with the permit conditions by not submitting all required paperwork within 30 days of installing the systems.

The Order assessed Crumley a \$2,352 penalty for the violations and placed conditions on Crumley's license for his unlawful and unpermitted installation of the systems.

Elsewhere in enforcement . . .

The DEQ received a penalty payment of \$3,540 from H-W Distributors of Great Falls and a penalty payment of \$3,600 from H-W Distributors of On Your Way, Lewistown, for violations of the Underground Storage Tank Act.

The DEQ received a penalty payment of \$1,500 from John D. Munro for failing to conduct monthly release-detection monitoring on underground storage tank systems and maintain release-detection monitoring records for the required 12 months, violations of the Montana Underground Storage Tank Act at John's Laurel Service Center, Laurel.

The DEQ received a penalty payment of \$1,500 from Conoco Quik Stop, Miles City, for failure to conduct monthly leak-detection and maintain records. Mulligan's Conoco, Kalispell, paid an \$800 suspended penalty payment

Enforcement Report - *continued from page 7*

for failure to submit monthly leak-detection records within timeframes specified in an administrative order.

The DEQ received \$400 penalty payments from Potomac Elementary School District #11 and from the Lincoln County Commission for violations of the Montana Underground Storage Tank Act at the Potomac Elementary School in Greenough and at the Libby Airport. Both public bodies failed to conduct monthly release-detection monitoring on their facilities' underground storage tank systems and maintain release-detection monitoring records for 12 months.

The DEQ received a \$400 penalty payment from the Reedpoint Sinclair for failure to comply with requirements of an Administrative Compliance and Penalty Order within specified timeframes. The DEQ received a \$200 penalty payment each from Randy Feters of Kenney's Super Service, Cut Bank, and from Stacey Oil Co., Whitefish, both for failing to conduct monthly release-detection monitoring and maintain release-detection monitoring records for 12 months. Rindal's Country Corner, Lewistown, paid a \$200 penalty for failure to provide corrosion protection on underground storage tanks.

Penalties collected under the UST regulations go to the state's general fund. ■



Montana TankHelper Online Underground

Simply log on to TankHelper, identify your facility and proceed through the service. When you finish, you can print out a plan that will help you manage your underground storage tanks.



Training for petroleum system operators to:

- Learn about your petroleum equipment
- Understand rules and responsibilities for your facility
- Get best management practices
- Simplify complex regulations
- Create a site-specific management plan

tankhelper.mt.gov